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## FEDERAL AVIATION AGENCY FLIGHT STANDARDS SERVICE

[14 CFR Parts 40, 41, 42]

[Notice 63-34; Docket No. 1927]

## ADVANCE NOTICE OF PROPOSED RULE MAKING

## Flight Time Limitations

The Federal Aviation Agency is considering amending the Civil Air Regulations applicable to the maximum hours or periods of service of air carrier crewmembers. Such rules applicable to flight crewmembers are presently set forth in Parts 40, 41, and 42 of the Civil Air Regulations and in related applicable operations specifications governing the operations of air carriers and commercial operators when conducting operations pursuant to these parts. These rules are prescribed in accordance with section 601(f) of the Federal Aviation Act of 1958 in order to preclude service by flight crewmembers while in a fatigued condition, in the interest of safe operations.

This Advance Notice of Proposed Rule Making is being issued pursuant to the Agency's policy for the early institution of public rulemaking proceedings. An "advance" notice is issued when it is found that the resources of the Agency and reasonable inquiry outside the Agency do not yield a sufficient basis to identify and select tentative or alternate courses of action upon which a rulemaking procedure might be undertaken, or when it would otherwise be helpful to invite early public participation in the identification and selection of such tentative or alternate courses of action. The subject matter has been found to involve the situation contemplated by this policy.

Interested persons are invited to participate in this proceeding by submitting such written material as they may desire. Communications should identify the notice or docket number, and be submitted in duplicate to the Federal Aviation Agency, Office of the General Comsel: Attention Rules Docket, Room A-103, 1711 New York Avenue, N.W., Washington 25, D.C. Communications should be received on or before December 3, 1963, in order to insure proper consideration. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. After consideration of available data and comments received in response to this notice, a subsequent notice of proposed rule making will be issued.

In view of the innumerable factors which relate to fatigue and the lack of precise rationale which may be used in establishing rules designed to preclude such fatigue, this area of rule making is one of the most complex and difficult with which the Agency is faced. Also, because of the vital importance of efficient flight scheduling to the economic well-being of air carriers and the fact that any rules in this area tend to limit the flexibility of such scheduling, the economic factors involved in prescribing such rules

cannot be ignored. On the other hand, the adverse effects of fatigue on the alertness and efficiency of crewmembers must be fully considered.

The present rules in this area have remained essentially unchanged for many years despite the many changes which have occurred in the nature of operations and they have been subject to numerous interpretations over the years in response to specific questions applicable to specific situations. As a result, there are in effect today a group of regulations which, in addition to having been subject to a number of interpretations, apply varying standards to different types of operations, the nature of which may no longer justify such varying standards. In addition, these rules, as they have been interpreted, may be unnecessarily stringent in some instances and in others be ineffective in precluding fatigue. Attempts to amend or up-date these rules have in the past been hampered to a degree by the strong and divergent views of the interested parties.

The Civil Aeronautics Board in publishing Civil Air Regulations Draft Release No. 55-15, emphasized the difficulty of such rule making as follows:

"In its study of the voluminous records relating or purporting to relate to the operational consequences of fatigue, the Bureau has been impressed with the fact that there are very few specific conclusions pertinent to air transportation which can clearly be justified, particularly so far as quantitative time limitations are concerned. The wealth of scientific literature in this field serves principally to enforce the view that we are here dealing with a subject of staggering complexity. Regulations in this field are not susceptible of so high a degree of rationalization as to insure against all adverse effects of fatigue and, simultaneously, insure against unreasonable restrictiveness. The Bureau has no illusions, therefore, concerning the possibility of finding a magic quantity which is readily supported by scientific evidence, and we fully expect to continue to be confronted with divergent views in any further exploration of this matter."

We agree with the above generalization; however, in the face of such difficulties, the Agency must resolve certain inconsistencies and questions which are a part of the present regulatory situation in this area. In order to do so in the most equitable and productive manner, this Advance Notice of Proposed Rule Making is being issued.

In conducting an overall review of the flight time limitation rules, it is anticipated that sufficient information will be obtained to enable the development of clear, concise, and effective rules, equally appropriate and appliable to all air carrier operations.

In so doing, consideration must be given to (1) using duty time in conjunction with or in lieu of flight time, (2) assuring adequate rest periods, (3) extending the applicability of the flight time rules to include cabin attendants, and (4) the specific numerical limitations which must be prescribed in order to preclude fatigue.

Comments, suggestions, and specific recommendations with respect to the following are therefore desired:

1. The use of daily duty time, in conjunction with, or in lieu of, flight time, as a limitation to preclude the performance of assigned functions by crewmembers while in an overly fatigued condition.

The limitations contained in Parts 40 and 41 applicable to scheduled air carrier operations are expressed primarily in terms of flight duty irrespective of the amount of on-duty time accured during the course of accumulating flight duty. While an 8-hour nonstop flight may involve only 9 to 10 hours of on-duty time, there is no limit to the duty time which may be required in accumulating 8 hours of flight duty on a multistop operation.

2. The prescription of clearer and more specific requirements for rest periods than are presently set forth in the rules.

If a flight crewmember subject to the provisions of Part 40 is not scheduled for, and does not exceed 8 hours of flight time in any 24-hour period, the rules do not preclude such 8 hours of flight time being scheduled in such a manner that little or no rest is possible until such time as 30 hours of flight has been accrued. While such a situation might never occur, it does highlight a possible deficiency in the rules which should be corrected by more specific requirements pertaining to daily rest periods. On the other hand, the rules, by interpretation of the term "series of flights," may in some instances require rest periods of such duration, and at such times, that the actual need for these rest periods could be questioned.

In the case of multiple or augmented flight crews, the present rules limit such a flight crew to 350 hours of flight in a 90-day period. These rules do not prescribe any specific rest periods within this 90-day period, but place upon the carrier the responsibility to schedule "adequate ground rest periods for the flight crew white away from their home base." In light of some recent scheduling practices, the Agency has proposed an interim revision to the Part 42 flight time rules, limiting the length of single continuous on-duty periods for which such flight crewmembers may be scheduled.

3. Extension of the flight time rules to include crewmembers other than flight crewmembers.

Existing flight time limitation rules are applicable only to flight crewmembers. While cabin attendants are not involved in piloting and navigating airplanes on which they serve, they are assigned certain duties which must, in the event of an emergency situation, be executed with a high degree of skill and com-

petence. As the degree of such skill and competence would tend to be diminished in the event such crewmembers became overly fatigued, consideration should be given to insuring that such fatigue is not induced by extremely long periods of duty, without proper intervening rest.

4. The specific maximum safe limits of daily flight and/or duty time for both nonaugmented or single, and augmented or multiple, flight crews having available sleeping quarters on board.

Under the existing requirements, nonaugmented flight crews operating pursuant to Part 40 may be scheduled for 8 hours of flight duty without an intervening rest period. In certain instances, on nonstop coast-to-coast flights, this limit is increased to 10 hours. On the other hand, under operating conditions existing today, the same flight crew, operating the same type of airplane pursuant to Part 41, may be scheduled for, and actually perform, 12 hours of flight duty. As stated above, the present rules do not specifically limit either the number of flight hours, or the length of an on-duty period, which a member of an augmented crew may be scheduled before he must be given a rest period on the ground. While the differences which at one time existed between domestic and international operations, i.e., the type of airplanes flown, the size and composition of the flight crews used, and other factors, undoubtedly justified these differences in flight time limitations, it is believed that such differences are no longer justifiable.

In view of the many complex problems which this subject presents and which have been highlighted above, the vital importance of rules in this area to the various interested parties, the many honest and sincere differences of view held by the various affected groups, and the urgent need to up-date, clarify, and simplify all of the rules in this area, the Agency desires and invites comments by all interested persons on this subject. As the development of a notice of proposed rule making in the area is one of the most difficult of regulatory projects, it is sincerely hoped that the comment requested herein will be objective and constructive. Categorical statements of position by affected groups are, and have been in the past, of little assistance in drafting rules in this area. The Agency is firm in its intention to effect that regulatory action considered necessary in light of the above discussion and desires the full cooperation of all interested groups in the development of an appropriate notice of proposed rule making.

> Director, Flight Standards Service.

Issued in Washington, D. C., on August 27, 1963